CLAIMS

We claim:

1. A laminated wood piece comprising:

(a) a solid hardwood component having an upper surface and a lower surface that are substantially parallel to each other; and

(b) a wood composite component having layers oriented substantially parallel to the lower surface of the solid hardwood component;

wherein the ratio of a thickness of the solid hardwood component to a thickness of the wood composite component is from about 1:1 to about 1:10, preferably from about 1:2 to about 1:5.

2. The laminated wood piece according to claim 1, wherein the thickness of the solid hardwood component is about 0.3 cm to about 1.3 cm, preferably about 0.6 cm to about 1.1 cm, and the thickness of the wood composite component is about 0.6 cm to about 5 cm, preferably about 2.2 cm to about 3.3 cm.

3. The laminated wood piece according to claim 1, wherein the wood composite component is an oriented strand board.

4. The laminated wood piece according to claim 3, wherein a width of the piece is about 3 cm to about 6 cm, preferably about 3.5 cm to about 4.5 cm, and a length of the piece is about 120 cm to about 305 cm, preferably about 215 cm to about 245 cm.

5. The laminated wood piece according to claim 1, wherein the laminated wood piece has a screw holding strength of about 400 lbs to about 1200 lbs.

6. The laminated wood piece according to claim 1, wherein the wood composite component is an oriented strand board and has a density of about 35 lbs/ft$^2$ to about 48 lbs/ft$^2$, preferably about 38 lbs/ft$^2$ to about 44 lbs/ft$^2$.

7. The laminated wood piece according to claim 1, wherein the laminated wood piece has a split resistance of greater than about 1000 lbs.

8. The laminated wood piece according to claim 1, wherein the wood composite component is an oriented strand board comprising strands, in which at least 90 wt% of the strands are oriented substantially parallel to the length of the laminated wood piece.

9. The laminated wood piece according to claim 1, wherein the wood composite component is an oriented strand board containing from about 3 wt% to about 6 wt% of binder, and from about 1% to about 2.5% of a wax additive.

10. A door including a frame, the frame including at least one stile member, the stile member comprising:

(a) a solid hardwood component having an upper surface and a lower surface that are substantially parallel to each other; and

(b) a wood composite component having layers oriented substantially parallel to the upper surface of the solid hardwood component;

wherein the ratio of a thickness of the solid hardwood component to a thickness of the wood composite component is from about 1:1 to about 1:10, preferably from about 1:2 to about 1:5.

11. The door according to claim 10, wherein the door further comprises an additional stile member being arranged substantially parallel to the at least one stile member and both the at least one stile member and the additional stile member have a substantially vertical orientation.

12. The door according to claim 10, wherein the door further includes a core, a pair of rails, and a pair of opposed doorskins.

13. The door according to claim 12, wherein the wood composite component of the at least one stile is in contact with the core.

14. A method for manufacturing a door comprising the steps of:

providing a core;

providing a door stile comprising:

(a) a solid hardwood component having an upper surface and a lower surface that are substantially parallel to each other; and

(b) a wood composite component attached to the solid hardwood component, the wood composite component having layers oriented substantially parallel to the lower surface of the solid hardwood component; and

securing the door stile to the core, with the wood composite component contacting the core, and the solid hardwood component being on the outer side of the wood composite component.

15. A method for manufacturing a door stile comprising the steps of:

preparing a wood composite panel having several layers and a thickness of about 0.6 cm to about 6 cm;

cutting the wood composite panel into a plurality of wood composite sections, each wood composite section having a width of about 3 cm to about 6 cm;

providing a solid hardwood component having an upper surface and a lower surface that are substantially parallel to each other; and

attaching one of the plurality of wood composite sections to the lower surface of the solid hardwood component, wherein the wood composite section has several layers oriented substantially parallel to the lower surface of the solid hardwood component.

16. The method according to claim 15, wherein the solid hardwood component has the same width as each of the wood composite sections.